

MAGENSA™

A MAGTEK COMPANY



MAGENSA SERVICES OVERVIEW

For over 15 years, we have been providing services to major financial institutions, retail, restaurant and other commercial organizations around the globe, securing sensitive data and processing high volumes of transactions securely. Magensa is a leading provider of data protection and payment gateway services. Companies interested in protecting personally identifiable information (PII), performing secure payments, or non-payment transactions use a variety of Magensa Services to accomplish their goals. Magensa delivers a portfolio of services that leverage our cryptographic core as a cloud service. When it comes to data protection and payment gateway services, Magensa's uniqueness stems from the flexibility and value our services provide to ISVs, developers, and integrators.

MAGENSA IS TRUSTED BY OUR CUSTOMERS - PROCESSING OVER A MILLION TRANSACTIONS A DAY, 24X7.

DATA PROTECTION

Magensa has protected hundreds of millions of records containing sensitive data throughout our history through dynamic encryption or our tokenization processes. Both technological approaches use a derived unique key for every transaction.

KEY MANAGEMENT

Magensa expertly operates hardware security modules and provides key management as a service. Employing symmetric encryption technologies that include the 3DES and AES algorithms combined with derived unique key per transaction (DUKPT) methodology to provide the ultimate in security and quantum proof peace-of-mind. Magensa receives the encrypted payload and efficiently decrypts for subsequent processing.

MAGTEK DYNA FAMILY - SECURE CARD READER

AUTHENTICATORS

MagTek manufactures a family of secure card reader authenticators under the brand "Dyna," each injected with a unique encryption key and authenticated to Magensa services. These readers are used to encrypt any kind of swipe/dip/tap reads of sensitive data or act as mini HSMs for encrypting data sent to the device programmatically. MagTek also provides a family of secure check scanners

MagTek card readers are available for desktop, mobile, and kiosks applications as well as integration modules.

MAGENSA TOKENEXCHANGE

Magensa's TokenExchange web services enable ISVs and developers to protect and secure sensitive data and transactions using dynamically hardware-encrypted, vaultless tokens. These tokens allow customers to retain control over their sensitive data in an anonymized, secure way. Magensa TokenExchange offers a variety of token format types.

Payment tokens contain encrypted PAN and expiration dates and are used for card-on-file, to support cross-merchant use, and facilitate secure "reduced PCI scope" eCommerce transactions. These tokens are automatically returned or are explicitly called using Magensa TokenExchange client-side JavaScript.

Transaction tokens encompass transaction data, merchant credentials, and branding elements. ISVs and developers receive a link or QR code for initiating secure payment transactions in any number of ways through a secure branded payment page hosted by Magensa, (patent pending).

CRM tokens uniquely identify and associate physical or digital wallet cards for loyalty, rewards, and other customer relationship management applications.

PII tokens are created to protect personally identifiable information from compromise. Magensa holds the key and users maintain custodianship encrypted and an unintelligible format.

One-Time-Use tokens allow issuers to provide guaranteed uniqueness across all customers and schemes, unpredictability, and one-time-use. This secure technology is used to authenticate people and payments and is trending globally.

Token storage is available through the Magensa TokenHub to support Magensa TokenExchange requirements or special use cases including format preserving needs.

MAGENSA PAYMENT GATEWAY SERVICES

Magensa payment gateway services deliver ISVs and developers:

- PCI-DSS certified environment for securely processing payment transactions.
- Dyna family EMV certifications with the leading payment processors including FIS (WorldPay), Fiserv (First Data), TSYS, Heartland, NAB (EPX), Elavon, and Chase.
- Flexibility of using a broad combination of Dyna family products and certified processors.
- Retail, restaurant, fuel, eCommerce, gift, and loyalty card application certifications with some or all processors.

Magensa responds to our customers' requests for furthering our application, industry, and geographical certifications.

MAGENSA PAYMENT PROTECTION GATEWAY (MPPG)

MPPG is our payment gateway supporting traditional Sale, Auth, Capture, Void, and Refund transactions to integrated processor endpoints.

- Typically, business or merchant applications call MPPG API methods with an XML/SOAP or a JSON/REST request that contains the encrypted card data from a device or an encrypted token.
- MPPG then decrypts the data or token and formulates a call based on the operation request and sends to the processor associated with the merchant credentials.
- A return authorization from the processor is passed through MPPG to the calling application along with a card token.
- MPPG homogenizes the interface to processors abstracting the development effort for easily switching between supported processors.

MPPG Touch-Free Platform

Convenience and safety are the drivers behind the Magensa touch-free Platform. Prior to the global pandemic, there was a trend towards contactless payments. Today, to protect both merchants and consumers the market is demanding new touch-free innovation. Always a payments leader, Magensa has introduced new tools and services offering ISVs and developers creative freedom in designing new payment applications. Central to Magensa's payment gateway services is the ability to deliver touch-free solutions on location, mobile, or on-line. Security through dynamic encryption and tokenization, a PCI-DSS infrastructure, and omni-channel support to initiate and complete payments are at the heart of the Magensa touch-free platform. Magensa Touch-free solutions include:

- **Magensa Payment Request (URL links or QR Codes):** Display or print QR codes to launch a secure payment page for touch-free pay at the table or curbside. Send a link by email or text for invoice or payment request. Payment is secured through a Magensa hosted payment page with the payment app updated via web socket connection to Magensa.
- **Magensa TokenExchange Connect:** eCommerce payments facilitated by embedded client-side JavaScript enabling direct connection to Magensa hosted, customer branded payment form. TokenExchange Connect is also implemented for secure integrated manual entry within POS apps or to establish card on file for apps.

- **Magensa Token Exchange Cross Merchant Tokens:** Support card-on-file for consumer profiles across multiple merchants via Magensa merchant token service linking
- **Contactless Acceptance:** MagTek Dyna readers that exclusively, or in combination with other capabilities, support NFC (contactless) cards or mobile wallets on a stand, lanyard, built into a phone or tablet case, or at a kiosk.
- **In-app/web-app digital wallet payments:** ApplePay/GooglePay payment support for frictionless payments
- **MPPG Manual Entry Portal:** Portals to facilitate merchant keyed transaction – standalone
- **Magensa PayPal/Venmo Integration:** Support for consumer-initiated transactions through Magensa with PayPal as another processor endpoint

These touch-free options and more, are available for transacting securely through Magensa payment gateway services.

MPPG Portals and APIs

Magensa has a variety of tools available for resellers and merchants within MPPG to on-board as well as provide merchant insights and transaction reporting. These include:

- **MPPG Reseller Portal:** Portal for ISVs/Resellers to board, view, and report on their merchants
- **MPPG Merchant Portal:** Portal for individual merchants to view transactions, and generate reports
- **Magensa Portal Service:** Merchant level API for reporting and real-time transaction information
- **Magensa Boarding Service:** Account Admin API for boarding merchants to MPPG

MAGENSA DECRYPT & FORWARD (D&F)

D&F provides ISVs and developers with both power and flexibility via a wrapper service. Many of our clients' most challenging business requirements have been solved with D&F.

- Securely deliver payloads of any format to any destination
- Use programming templates in XML/SOAP or JSON/REST to message, decrypt, manipulate, and insert data and forward to white-listed endpoint(s)
- No restriction to what can be done
- ISV and developer logic, with endpoint requirements, control the transaction
- D&F executes what it is instructed to do and has no sense of the transaction or operations being performed

MAGENSA REMOTE SERVICES

Magensa Remote Services enable field modifications of MagTek Dyna family products. This service provides organizations, especially with large and diverse deployments, with operational efficiency and technology obsolescence protection. Magensa Remote Services allow user to

- update firmware
- change configuration settings
- and load keys

Integration ready for ISV and developer applications using XML/SOAP or JSON/REST or initiated via a Magensa Remote Services user interface called MagTek Reader Configuration application.



Founded in 1972, MagTek is a leading manufacturer of electronic systems for the reliable issuance, reading, transmission and security of cards, checks, PINs and identification documents. Leading with innovation and engineering excellence, MagTek is known for quality and dependability. Its products include secure card readers/authenticators, token generators, EMV contact, contactless and NFC reading devices, encrypting check scanners, PIN pads and distributed credential personalization systems for secure magstripe and EMV enabled cards. These products are used worldwide by financial institutions, retailers, and processors to provide secure and efficient payment and identification transactions. Today, MagTek continues to innovate. Its MagSafe Security Architecture leverages strong encryption, secure tokenization, dynamic card authentication, and device/host validation enabling users to assess the trustworthiness of credentials and terminals used for online identification, payment processing, and high-value electronic transactions. Serving enterprises globally, Magensa provides a wide range of innovative tools and transaction processing services for authentication, cryptographic security, and privatization of sensitive data. Magensa's encryption/decryption services, payment gateway services, tokenization services, remote services, and applications are used by software developers, ISVs and systems integrators to bring their applications to market faster and more securely. Magensa's services and solutions are trusted by commercial, retail, financial and government enterprises without compromise. Magensa, LLC is a subsidiary of MagTek, Inc.

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